

THE CLAIMS

What I claim is:

4. A process for converting equatorial coordinate data of individual stars and objects of the heavens, wherein said heavens include the group of twelve traditional zodiac constellations, to ecliptic coordinate data, in celestial longitude and latitude, comprising:

utilizing equatorial coordinate data of individual stars and objects, wherein said equatorial coordinate data comprises celestial position in right ascension,  $\alpha$ , and declination,  $\delta$ , which further comprises, utilizing said right ascension data in degree of 360 proceeding east from equatorial system origin at vernal equinox, if in sidereal hours converting to degree of 360, utilizing said declination data in degree north (+) or south (-);

calculating said latitude,  $\beta$ , from said equatorial data by:

$$\beta = \arcsin (-\cos\delta \sin\alpha \sin\epsilon + \sin\delta \cos\epsilon),$$

wherein  $\epsilon$ , the obliquity of the ecliptic, in degrees;

calculating said longitude,  $\lambda$ , from said  $\alpha$ ,  $\delta$  and  $\beta$  data by:

$$\lambda = \arccos ((\cos\delta \cos\alpha)/\cos\beta),$$

which further comprises if said stars and said objects utilizing right ascension data of between 180 and 360 degrees, calculating said longitude,  $\lambda$ , from said  $\alpha$ ,  $\delta$  and  $\beta$  data by:

$$\lambda = 360 - \arccos ((\cos\delta \cos\alpha)/\cos\beta);$$

generating said ecliptic coordinate data, in said  $\beta$  and  $\lambda$ .

5. A catalogue storing the ecliptic coordinate positions of the heavenly constellations, said constellations include the group of twelve zodiac constellations, comprised of the group of the individual stars and objects configuring each constellation, wherein said ecliptic coordinate positions of said constellations comprising ecliptic coordinate data, in celestial longitude and latitude, in the zodiac signs, and by parts of zodiac symbols.

6. A method for aligning the zodiac signs, accurately aligning zodiac signs by precession of the equinoxes, measuring elapsed precession twixt terminus a quo and ad quem, wherein said terminus a quo is point in time when tropical zodiac sign positions correlated to the empirical zodiac constellations, and wherein said terminus ad quem is point in time to be aligned, comprising steps of:

defining said terminus a quo, and include at time of ancient astronomy, by star marker, or at time of change between the Ages;

defining said terminus ad quem, establishing elapsed time;

calculating precession, applying rate of general precession, of precession in longitude or of component parts to elapsed time;

aligning zodiac sign on said origin for terminus ad quem by rotating tropical sign positions by said calculated precession.

7. In the invention of claim 6, which further comprises precessing said zodiac sign alignment on said origin, comprising precessing by the precession of equinoxes over time, which further comprises calculating accurate precession twixt said terminus ad quem and a second terminus ad quem, utilizing the rate of general precession, of precession in longitude, or by component parts, wherein said terminus ad quem is point in time of said aligning, and wherein said second terminus ad quem is point in time to be aligned, aligning by calculated precession.

8. In the invention of claim 6, which further comprises mapping the zodiac constellations in celestial coordinates of said aligned zodiac signs, comprising having an uniform 30 degree arc of the 360 degree coordinate sphere for each zodiac sign, wherein origin is 0°, and zodiac sign on origin, and zodiac sign at each point along the ecliptic belt, correlating to precession, determining positions of said zodiac constellations, said constellations include the group of twelve traditional zodiac constellations and configured by the group of stars and objects.

9. In the invention of claim 5, which further comprises a celestial mapping of the zodiac signs, locating the positions of the twelve zodiac signs as viewed from earth, and for deriving astrological information based thereon, wherein the positions of said twelve zodiac signs, said signs include the group of twelve traditional zodiac signs ringing the zodiac belt, and the positions of zodiac components based thereon, correlating to twelve zodiac constellations, said constellations include the group of traditional constellations along said zodiac belt, comprising:

an uniform 30 degree longitudinal arc of the 360 degree coordinate sphere for each zodiac sign, wherein origin is 0°, and zodiac sign on origin, and zodiac sign at each point along ecliptic belt, determining positions by order of zodiac signs; or

an arc of the 360° ecliptic coordinate sphere for each zodiac sign, each sign set by span of its constellation in longitude, wherein zodiac sign on origin and on each point along ecliptic belt correlate to zodiac constellations spanning the zodiac belt.

10. In the invention of claim 5, which further comprises a celestial mapping of the zodiac signs, locating the positions of the twelve zodiac signs as viewed from earth, and for deriving astrological information based thereon, wherein the positions of said twelve zodiac signs, said signs include the group of twelve traditional zodiac signs ringing the zodiac belt, and the positions of zodiac components based thereon, correlating to twelve zodiac constellations, said constellations include the group of traditional constellations along said zodiac belt, comprising:

a region of two-dimensional ecliptic coordinate space for each zodiac sign, each zodiac sign set by its physical two-dimensional constellation configured by its stars and objects; or

a region of two-dimensional ecliptic coordinate space for each zodiac sign, each zodiac sign set by its zodiac symbol figured on stars and objects comprising its named constellation.

11. A method for creating astrological data, and artifacts and information based thereon, and the tools, resources and objects manufactured to reflect, house or process said data, artifacts and information, determining subject data for a date, subject inquiry, and for pluralities of subjects, by locating throughout time the positions of twelve zodiac signs, said signs include the group of twelve signs comprising the zodiac, and of zodiac components based thereon, said components include the group of planetary and axial components, wherein said sign position correlating to twelve respective named constellations, said constellations include the group of twelve traditional zodiac constellations ringing the zodiac belt, comprising steps of:

defining said zodiac belt in celestial coordinate sphere, having an origin at a discrete moment or celestial point, and using an ecliptic, equatorial or rectangular coordinate system;

determining data of sign positions on said zodiac belt by:

30/360 grid, wherein each sign having 30° arc of 360° along said belt, said positions of said signs align by applying determination of zodiac sign on origin by operation of claim 6, said determined zodiac sign on origin defining each zodiac sign in order based thereon proceeding east from said sign on origin;

celestial layout of physical stars and stellar objects configuring said constellations, said positions of said signs comprised by zodiac constellations of non-uniform dimensions, said sign on origin correlating to its apparent constellation; or

zodiac symbols and symbol parts, configured to physical stars and objects of said constellations, said positions of said signs comprised by symbol and symbol part of each zodiac sign on constellation, said sign on origin correlating to zodiac symbol;

determining said positions of zodiac components, defined by said sign position data correlated to said zodiac constellations, as of a selected date, time and location, and as sets of discrete dates in time, as said zodiac planetary and axial component data.

12. In the invention of claim 11, which further comprises assembling and tabling said position data of said zodiac signs, and of said zodiac components, for dates, compiling reference resource data and data resources providing a group of ephemeris, book of houses and Sun sign horoscopes, wherein said data and resources include the group of said planetary components, the group of axial components, and the group of zodiac Sun signs, having zodiac correspondence to the group of twelve Lunar signs.

13. Horoscope, ephemeris and book of houses apparatuses, said apparatuses storing assembled and tabled sign position data, said position data provided by method of claim 11, comprising:

- an apparatus storing sign position data by calendar dates;
- an apparatus storing sign position data of zodiac planetary components, by sets of daily and of periodic positions over time;
- an apparatus storing sign position data of zodiac axial components, for local sidereal times and for Northern latitudes.

14. A process for converting subject inputs of selected date, local time and location to local sidereal time, comprising:

utilizing said input date, time and geographical location, wherein said date comprising a day, month and year, said time comprising local time in AM or PM at said geographical location, and said location comprising degrees in longitude and latitude;

calculating local sidereal time, comprising converting local input time to GMT per standard time zone hours; adjusting the converted time for sidereal movement, by looking-up sidereal time Greenwich noon for date, finding the interval between converted time and noon, adjusting noon GMT time by found interval time, finding the acceleration on the found interval, and by adjusting noon GMT time by found acceleration; and adjusting resultant time for longitudinal equivalent, rendering said local sidereal time (LST) for input parameters; if southern latitudes, LST is said rendered LST increased twelve hours, axial components opposite.

15. In the invention of claim 11, which further comprises processing and assembling analytic artifacts from component data, for a subject time, date and location, said artifacts include the group of analytic tables to storing and portraying astrological disposition, holding subject zodiac component data by zodiac sign to degree of thirty per sign, by constellation, and by symbol.

16. In the invention of claim 11, which further comprises processing and assembling subject natal astrological data, to rendering said data in astrological style artifacts of Western tropical, Eastern vedic sidereal and Chinese lunar animal design.

17. In the invention of claim 11, which further comprises processing the geometric aspects between said zodiac components, wherein said aspects include the group of geometric aspects, assembling an aspect grid, and marking charts with aspect lines.

18. In the invention of claim 11, which further comprises processing and assembling advanced component data and artifacts of progressed and transit data and artifacts, for a progressed or transit date, time and location, said data and artifacts include the group of said data, and of tables and charts based thereon.

19. In the invention of claim 11, which further comprises processing and assembling advanced component data and artifacts of synastry and composite data and artifacts, for two subjects by date, time and location, said data and artifacts include the group of said data, and group of tables and charts based thereon.

20. In the invention of claim 11, which further comprises processing and assembling two-dimensional and three-dimensional charts of subject zodiac planetary and axial component data, wherein include the group of charts mapping said zodiac signs, zodiac constellations by constellation stars, and zodiac symbols.

21. A three-dimensional astrological chart, comprising means for displaying a comprehensive perspective of the celestial zodiac band vantage outside said band, which further comprises:

means for mapping positions of the zodiac constellations by physical stars, and of zodiac components for subject, comprising a three-dimensional reproduction of the physical stars of the zodiac constellations located in a spherical band about said ecliptic, said band encircling earth, locating subject at center, means for centering a line on said band representing the ecliptic, wherein determining northern latitudes and southern, means for vertical lines from centering line determining a grid of twelve zodiac signs along said zodiac belt, means for connecting said stars configuring said constellations in outline, means for mapping said components to representing said subject.

22. An astrological apparatus comprising means for a circular chart, said circular chart housing an ecliptic coordinate system having 360 degrees, said chart having perimeter defining 360 degrees longitude radiating from center, comprising:

said circular chart having an origin radius to perimeter, degrees along said chart perimeter proceeding counter-clockwise, or proceeding clockwise determining reversed system perspective;

said circular chart having a band on said perimeter, said perimeter band divided into twelve zodiac sections, wherein arc of each zodiac section defines a sector of said circular chart, each sector marked in said perimeter band by the zodiac glyph of the correlated zodiac sign, proceeding in said clock direction;

means for an interior circle between said chart center and its perimeter, said circle representing the ecliptic, wherein positions outward from said circle are northerly and inward are southerly,

means for plotting individual stars of zodiac constellations by celestial longitude and latitude, each constellation configuring by stars, such stars connecting in outline, and means for rendering illustration of each zodiac symbol on its respective constellation.

23. A method for determining the opposite zodiac signs under which a person is born, and for pluralities of subjects, wherein the position of the earthbound subject is correlated to the astrological system perspective of said earthbound subject as viewed from each zodiac planetary component, comprising steps of:

utilizing the positions of twelve zodiac signs as viewed from earth, wherein said signs include the group of twelve signs comprising the zodiac, said positions of said signs provided by Western tropical or Eastern vedic art, or by claim 11, methods;

determining zodiac planetary and axial component positions based thereon, viewed from said earthbound subject at center, as of a selected date, time and location, or as sets by calendar dates through time, as zodiac component data, wherein said zodiac components include planetary components, said planetary components include the group of ten planets comprising the sun, the moon and eight non-earth planets, and wherein said zodiac components include axial components, said axial components include the group of angular regents and twelve numbered houses;

altering said planetary component data, comprising casting said position data of each planetary component into the zodiac sign opposite of the one determined from the earthbound perspective, wherein if position is by sign and degree of 30, said opposite position is to the same degree in opposite zodiac sign, or wherein if position is by physical-star constellation, said opposite position is to the opposite point, in zodiac constellation, across the zodiac belt with earth as mid-point;

processing said zodiac data into astrologers' artifacts, wherein include an astrological chart, having the position of said zodiac signs, constellations, planetary components and coordinate points on said chart proceed in order in counter-clockwise direction, or in order in clockwise direction; and

assembling said data and artifacts as subject information, as tables of positions and disposition and astrological charts;

utilizing said information to representing subject profile.



24. In the invention of claim 11, which further comprises providing an astrological prediction from said subject data, to portraying and predicting subject nature, profile and horoscope.

25. A process for establishing the correspondences between astrology and tarot, useful for determining the tarot signature of a subject set of astrological zodiac components, for determining the numerological identifications of the input date for said subject set of astrological zodiac components, and for determining the alpha-numerological identifications for an input name of said subject of said subject set, said identifications respective set of astrological tarot correspondences, comprising:

corresponding ten planets of astrology to the first part of the major arcanum of the tarot deck, numbered I to X, which comprises assigning the sun to I, the eight non-Earth planets in order proceeding outward from the sun to major arcanum II through IX, and the moon to X, and wherein the remaining twelve cards of the major arcanum, numbered XI to XXII, corresponding to the twelve zodiac signs of astrology, said zodiac signs proceeding in order east from the vernal equinox, starting at major arcanum XI and ending at major arcanum XXII, and which further comprises assigning each tarot court card to one of the astrological qualities, the king corresponding to cardinal, the queen to fixed, and knight or page to mutable, and wherein each of the group of four tarot minor arcanum suits is uniquely associated with a particular astrological element, wherein the five Chinese elements associating with four astrological elements plus akasha;

identifying the astrological tarot correspondences of said zodiac components comprising said set of components, wherein include identifying astrological tarot correspondences by zodiac planetary component, listing zodiac planetary components per zodiac signs assigned to major arcanum XI to XXII, and listing the astrological tarot disposition of said subject component set;

identifying the day number of the day of the month of said date, if said day number be identified greater than 22, reducing such number by summing its digits to obtain identification;

identifying the digit number established by adding together each individual digit comprising said date, said date composed of said date of day, month and year, wherein each calendar month is a number from 1 to 12 commencing with January as 1 and ending with December as 12, and wherein said year in full, if said digit number be identified greater than 22, reducing such number by summing its digits to obtain identification;

identifying the decade number established by first summing the full numbers of said date of month, day and year, and then adding together the unique digits comprising said summed number, if said decade number be such identified greater than 22, reducing such number by summing digits to obtain identification;

identifying the astrology and tarot correspondence for each of said day number, said digit number and of said decade number respecting said identified astrological tarot correspondences;

identifying the alpha-numeric signature of said input name of said subject, wherein utilizing a set system of correspondences between the letters of the alphabet and the digit numbers one to nine, each said number per letter of said subject name is summed together, each said number per letter of each name comprising said subject name, said subject name, and each comprising name, having an own alpha-numeric signature, wherein if said name number be such identified greater than 22 reducing, and wherein said alpha-numeric signature of said subject name, and of comprising names, determining set of non-prime divisors.

26. In the invention of claim 25, which further comprises providing a prediction from said subject tarot signature, from numerological identifications of said subject input date, or from said alpha-numerological identifications for said input name, to portraying and predicting subject nature, profile and horoscope.

27. A computer-based apparatus and program, comprising means for processing subject inputs, said inputs include subject name and subject birth date, place and local time, comprising:

means for processing alpha-numerological identifications of said subject name and for each unique name comprising said name;

means for identifying the numerology of said subject date;

means for user selected preferences, and include precise setting coordinate system origin, selecting astrological system perspective and selecting astrological sign position art form;

means for generating system perspectives, such perspectives include earth-bound vantage and alternate system perspectives, such alternates include opposite and reverse system advantages;

means for housing ephemeris, book of houses, and references;

means for generating subject component data, wherein said data provided by method of claim 11, by processing input date, time and place, looking-up subject data in reference resources;

means for generating tables of disposition, which further comprises listing planetary component positions, angular regents and analytic tables including table of astrological disposition;

means for calculating aspects and generating aspect grid;

means for Western design charting, which further comprises generating natal, progressed, and transit data and artifacts;

means for synastry and composite charting, which further comprises generating overlay and composite data and artifacts;

means for Eastern design charting, which further comprises generating North and South Indian design data and artifacts;

means for generating data of Chinese signs and ascendant;

means for identifying astrological tarot correspondences;

means for locating the stars of the zodiac constellations;

means for charting said stars of the zodiac constellations;

means for configuring zodiac symbols to said constellations;

means for mapping subject components to said constellations;

means for mapping the zodiac symbols to said constellations;

means for mapping subject components to said zodiac symbols;

means for storing templates of astrological mapping charts;  
means for generating said charts mapping subject components;  
means for generating a subject Sun sign horoscope per date;  
means for generating a subject profile or interpretation;  
means for output of subject data, artifacts and information;  
means for storing subject output to memory in database; and  
means for generating statistical archives of said database.

28. An integrated server-based system, said system having a merchant server system and a member server system, wherein said merchant system and said member system integrating at the home page and by firewall link between said systems, servers hosting, and having means to downloading, free open access FTP, fee-for-service and membership fee-based, products, content and services.

29. In the invention of claim 11, which further comprises providing said data, artifacts and information, wherein include the group of products, content and services, comprises providing:

a printed-matter toolbox system, which further comprises assembling printed matter componentry of ephemeris and look-up reference resources, instruction manual for processing subject data from input date, time and location, and artifact templates;

a computer-based stand-alone system, which further comprises assembling a computer program in memory or digital medium, with automated processing of subject inputs, output and content via integrated routines, stored databases and coded output templates;

a server-based networked system, which further comprises assembling for remote access by users via the internet and web, with processing and output by digital automation, and user input and output transmitted by telecommunications signal carrier; or

a broadcast or voice system, which further comprises communicating data to users via telecommunications or in-person, wherein information is transmitted by signal carrier or unaided, wherein said broadcasting include the group of media programming.

30. A method for modifying and improving astronomy articles of manufacture for astrological purposes, such articles include the group of digitally-coded computer-based planetarium programs, wherein said programs rendering the celestial sphere, and stars, constellations and planets located within said celestial sphere, and a method for modifying and improving astrology articles of manufacture for constellation correlated astrological purposes, such articles include the group of digitally-coded computer-based astrological data, artifact and information generating programs, comprising steps of:

for astronomy articles of manufacture:

mapping the celestial sphere in ecliptic coordinates, wherein said coordinates are in celestial longitude and latitude;

plotting ecliptic coordinate data of individual stars comprising the constellations on said sphere, and of planetary objects, wherein said objects include the group of the sun, moon and eight non-Earth planets, for a given date, time and location;

assembling tabular artifacts of data of said objects, sorting data and utilizing coded astrological artifact templates to listing objects by zodiac sign and astrological disposition;

assembling two-dimensional and three-dimensional chart artifacts, wherein said charts of circular and spherical design, plotting data and utilizing coded astrological artifact templates to providing a comprehensive view of said sphere, stars, objects;

calculating geometric aspects between said objects, assembling aspect grid identifying said aspects between objects, and including aspect lines between objects on assembled charts;

illustrating the figure of the mythological symbol of each zodiac sign on respective constellation in celestial sphere, and assembling such in two- or three-dimensional chart artifacts;

generating said celestial sphere, data and artifacts;

for astrology articles of manufacture:

including zodiac stars, constellations, and symbols, to mapping, assembling and generating astrology data and artifacts.

31. An astrological tarot apparatus comprising means for a circular chart, such a circular chart housing an ecliptic coordinate system having 360 degrees, said chart having perimeter defining 360 degrees longitude radiating from center, comprising:

said circular chart having an origin radius to perimeter, degrees along said chart perimeter proceeding counter-clockwise;

said circular chart having a band on said perimeter, said perimeter band divided into twelve zodiac sections, wherein arc of each zodiac section defines a sector of said circular chart, each sector marked in said perimeter band by the zodiac glyph of the correlated zodiac sign, proceeding in said clock direction;

means for a second, movable, band exterior to said perimeter band, wherein arc of each zodiac section defines a sector of said exterior band, each sector in said exterior band marked by representation of a tarot card of the major arcanum, numbers XI through XXII, said cards proceeding in numeric order, in said clock direction, wherein said exterior band can rotate around said chart and perimeter band, aligning cards with said sections.

32. A deck of astrological tarot cards, an apparatus useful for meditation, divination and interpretation, comprising means for providing a deck of seventy-eight or seventy-four individual cards, wherein said cards include the group of twenty-two major arcanum cards numbered one through twenty-two, wherein said twenty-second card can be alternately numbered as zero, and wherein said cards include the group of fifty-six or fifty-two minor arcanum cards, wherein said group comprising four suits named and signified as batons or wands, cups, swords, and pentacles or coins, each said suit containing cards numbered one through ten, and each said suit containing court or face cards of king, queen, knight and page, or each said suit having court cards of king, queen and page, which further comprises:

means for identifying or signifying each said major arcanum card one through ten by its correspondent astrological planet,

wherein one corresponds to the Sun, two through nine correspond to the eight non-Earth planets in order as they emanating from the Sun respectively, and wherein ten corresponds to the Moon;

means for identifying or signifying each said major arcanum card eleven through twenty-two by its correspondent astrological sign, said astrological signs comprising the twelve signs of the zodiac, each sign in order emanating from the zodiac sign marking the vernal equinox, proceeding east on the zodiac belt;

means for identifying or signifying each said minor arcanum suit card by its correspondent astrological element, wherein batons or wands correspond to fire, cups to water, swords to air, and pentacles or coins to earth;

means for identifying or signifying each said minor arcanum card numbered one through ten by its correspondent astrological planet, wherein one corresponds to the Sun, two through nine correspond to the eight non-Earth planets in order emanating from the Sun respectively, and ten corresponds to the Moon, which further comprises:

means for identifying or signifying each said minor arcanum card numbered one through ten by its astrological disposition, wherein include the group of favorable, neutral and unfavorable disposition, wherein the favorable dispositions are regency and exaltation, and wherein the unfavorable are detriment and fall, said disposition determined by the element of the suit, indicative of the three astrological signs comprising each element, with respect to the disposition of the planet, such as card four, signified by Mars, Mars ruled by Aries, a fire sign, the four of batons is favorably disposed;

means for identifying or signifying each said court card by its astrological element and by its astrological sign, wherein the astrological elements by suits, and cardinal sign to king, fixed sign to queen, and mutable to page, and element to knight.

33. An astrological book, an educational apparatus, comprising means for informing, educating and teaching the reader or user astrological practices correlating to empirically valid astrological sign positions, said empirically valid positions correlating to the zodiac constellations, which further comprises:

means for determining the precise aligning of an origin of a celestial coordinate mapping of the zodiac belt by zodiac sign, which further comprises determining said alignment by precessing an ancient constellation-correlated marking by the rate of general precession, of precession in longitude, or of precession in parts, over an interval from ancient date to an elapsed date;

means for disclosing the determination of the zodiacal Age, by applying precession, physical star marker or zodiac symbol part, which further comprises earth-centered or opposite vantage;

means for disclosing empirically valid scientific facts or calculations, wherein the zodiac sign positions or calendar dates of Western, Eastern or Chinese astrological forms demonstrating or proving to be inaccurate, misleading or factitious in nature;

means for disclosing approximate corrections to contemporary Western, Eastern or Chinese astrological zodiac sign positions, which further comprises:

if Western sign positions, rotating the ring of signs about one full sign, about thirty degrees, backward or West;

if Eastern sign positions, rotating the ring of signs about six degrees, thirty minus the ayanamsa, backward or West;

if Chinese positions, rotating the order of zodiac Sun signs about one sign, wherein Scorpio aligns with animal sign Rat;

means for determining constellation-correlated positions of the astrological components for a date, or date, place and time;

means for displaying empirically valid and constellation-correlated sign positions for a date, or date, place and time.

*David Andrew D'Zmura*

Prepared by David Andrew D'Zmura



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☒ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:**

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**